



**A HAPPY LOT THEY ARE**, even after a 24-hour stay in the fall-out shelter in 9201-5. Some are seen with fold-away cots that were provided in the shelter for beds. This cheery group is seen just prior to leaving the shelter last Wednesday morning . . . without coffee, without washing or shaving, and without contact with the outside world for a full day.

## Nuclear Power Is IEEE Meet Topic

The Oak Ridge Section of the Institute of Electrical and Electronics Engineers will meet tomorrow, Thursday, March 11. The meeting is scheduled at the Ridge Recreation Hall.

Ray C. Freeman, manager of General Electric's Atomic Power Equipment Operation, will speak on "Recent Developments That Make Present Day Economics of Nuclear Power Plants Real and Reliable." He will cover economics on which present price schedules are published, and an evaluation of such decisive breakthroughs as Jersey Central's Oyster Creek Plant and Commonwealth Edison's Dresden II. Capital costs, fuel cycle costs, operation, etc. will also be discussed along with new developments in such areas as nuclear superheat.

Freeman, a graduate of the University of Minnesota, has had some 25 years of engineering, engineering management and general management for GE. Since 1961 he has been located at GE headquarters in New York as manager of the Atomic Power Development Section.

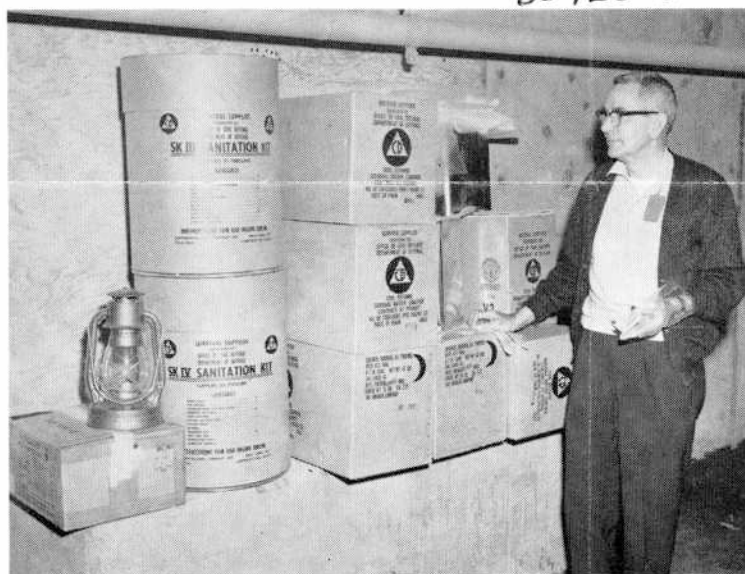
All IEEE members and guests are invited to attend tomorrow's meeting.

### NO ROOM AT THE TOP

When your shoulders are laden with responsibilities, there isn't much room left for a chip.

### SAFETY SCOREBOARD

The Y-12 Plant Has  
Operated  
**96 Days Or**  
**2,856,000 Man-Hours**  
(Unofficial Estimate)  
Without A Disabling  
Injury  
**Through March 7**  
Phone 7755  
For Daily Report  
On Accident-Free Hours



**DICK BROTHERS ACTED AS SHELTER MANAGER** and here checks the supplies allotted to the shelter used in the experiment. The Federally-approved stock includes food rations (750 calories a day), water, and sanitation kits.



**TELEPHONE CONTACT WAS KEPT** with the shelter for the full 24-hour period. Here H. N. Benninghoff mans the control station immediately above the fall-out shelter. Had this been a real attack, rather than a practice one, Benninghoff would have been located in another shelter. Benninghoff and R. W. Brothers attended a training session at the Eastern Training Center, which is situated in Brooklyn, New York.

## 37 Y-12ers Simulate Fall-Out Shelter Stay In Good Spirits

### Volunteer Group Remains For 24-Hour Period In Austere Conditions Of Civil Defense Alert

"Nuclear war in the United States would result in a great loss of life, great devastation and great misery," said Dr. E. P. Wigner, recently. Wigner is head of a special civil defense research project at the Oak Ridge National Laboratory. "But appropriate protective measures, well within the economic means of the nation could drastically reduce the number of casualties," Wigner continued.

"Few will deny that a civil defense program could save many lives. These would be lives that could not be saved in any other way. Even if we build enough offensive weapons, Polaris submarines and Minutemen, to make our retaliatory power so great that it would be madness to attack us, it is conceivable that an accident or an erroneous belief that we could be knocked out might lead to an attack on the United States."

Some positive appropriate protective measures were exerted last week in Y-12, as 37 employees went into a simulated 'take-cover' experiment, and spent 24 hours in a fall-out shelter.

### Actual Nuclear Fall-Out Conditions Simulated in Experiment

And what is life like in a fall-out shelter? At least 37 Y-12ers can answer that question after last week's experiment. (The 36 new shelters managers were accompanied by instructor R. W. Brothers.) The men went into the shelter at 8 a.m. last Tuesday and came out at 8 a.m. the following day, Wednesday, March 3.

Y-12 is the only plant in the Oak Ridge complex with accommodations for less personnel than the plant population. (There are provisions for 16,000 at ORNL, 26,000 at K-25 and only 2,600 in Y-12, with approximately 6,000 additional in the city of Oak Ridge.)

To initiate a 'real McCoy' alert, the city of Oak Ridge would receive the warning from NAWAS (National Warning System), a part of NORAD (North American Air Defense Command.) Transmitted to Y-12 by the local Atomic Energy Commission, the alert would then be given by voice announcement over the plant public address system. The take-cover signal would then follow on the plant sirens.

The Air Attack Plan is covered in the Y-12 Emergency Manual. Supervision is responsible for the actions of employees from here on out.

### Shelters Identified By Yellow And Black Federal Signs

There are public shelters in Y-12 in the basements and air tunnels of buildings 9201-1, 9201-2, 9201-3, 9204-1 and 9204-3. All are stocked with Federal supplies which include food, water, medical and sanitation kits. These shelters are identified by the official black and yellow federal shelter markers. Since the normal daytime plant population exceeds the shelter space available in the plant, some employees would have to seek shelter elsewhere (either at K-25, ORNL or in the basement of some of the apartment buildings in Oak Ridge.)

The Western Exclusion Area in Y-12 also contains some federally stocked shelters, providing space for approximately 1,300 shelterees. Those employees who have security access to this area are entitled to use the shelters located within the security perimeter.

Y-12's management recently approved the formal training of 36 shelter managers who will voluntarily serve in the shelters located in the exclusion area. These managers have completed a nine-hour course of certified instruction in shelter management and in addition have participated in the 24-hour in-shelter exercise conducted in one of the areas under austere conditions. Several hours of additional training and instruction were also completed in the shelter as a functional part of the in-shelter exercise.

### Men From All Over Plant Share Experience Of Fall-Out Exercise

Those certifying as shelter managers and taking part in the fall-out shelter trail are O. M. Blackwell, W. L. Beeler, J. C. Bishop, R. E. Bohanan, L. H. Boyd, J. L. Brown, W. G. Butturini, R. T. Cantrell, J. R. Day, G. W. Evans, R. D. Ellingson, C. R. Harris, L. S. Hawk, K. G. Kahl, E. V. Larmoyeux, R. J. Luck, J. H. Marquiss, C. R. McGinnis, H. C. Nichols, H. E. Patterson, K. E. Prater, J. D. Rose, J. H. Rowan, C. Scott, H. G. Simerly, J. P. Smith, J. C. Thomason, C. B. Tolliver, A. B. Townsend, E. J. Tullos, W. E. Wampler Jr., J. F. Warner, J. L. Waters, J. H. Shoemaker, J. M. Seivers and M. Sanders.

The training course was conducted by two Y-12ers who were certified for this instruction by attendance at the Eastern Training Center, Brooklyn, New York. H. N. Benninghoff and R. W. Brothers satisfactorily completed the shelter manager's instructors' course.

What did the 37 men learn from their stay in the shelter? One recommendation is that there would be a need for additional materials and supplies other than those normally stocked in the shelter. (The food is without salt . . . dull, dry tasteless crackers.) Such materials and supplies would be of extreme value in the comfort and

Continued on Page 4



# The Bulletin

Published Weekly For The  
Y-12 Employees Of  
UNION CARBIDE  
CORPORATION



NUCLEAR DIVISION

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Member



Appalachian  
Industrial  
Editors'  
Association

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## Chemicals Division Names New Officers

The Chemicals Division of Union Carbide Corporation has named four vice presidents, according to an announcement from Paul L. Alspaugh, division president.

Thomas W. Carmody has been made vice president — marketing, and Richard W. Eddy, Maxwell Hill Jr., and William C. Morro Jr. were named vice presidents and business area general managers.

Carmody joined Union Carbide in 1948 as a sales engineer in the New York Office of the Chemicals Division. He moved to the Olefins Division in 1958, where he has been manager — marketing, olefins products since 1963. He was graduated from the Massachusetts Institute of Technology with a BS degree in chemical engineering, and from the University of Delaware with an MS in chemical engineering.

### South Charleston Vet

Richard W. Eddy joined Union Carbide in 1940 as a laboratory technician at the South Charleston, West Virginia, plant. In 1948, he was transferred to the New York office where he served in the new chemicals sales development area for the division. From 1962 until his present appointment, he has been general manager — chemical intermediates. Eddy was graduated from Ohio University with a BS degree in chemistry. He also holds an MS degree in organic chemistry from MIT.

Maxwell Hill Jr. became associated with Union Carbide in 1941 in the process development department of the Chemical Division at South Charleston. In 1956, he joined the division's staff in New York as production manager — new chemicals. He has been general manager — coatings intermediates since 1962. Hill received a BS degree in Chemistry from the University of Notre Dame.

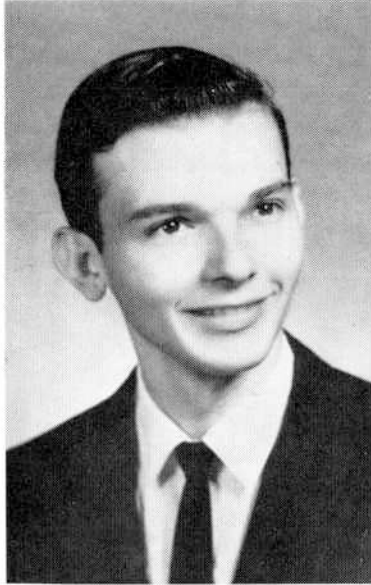
### William C. Morro Jr.

William C. Morro Jr. also joined Union Carbide at the Chemical Division in South Charleston . . . in 1941. After handling a number of assignments in South Charleston, New York, and Texas City, he returned to the New York office in 1960 as control manager for the Olefins Division. He has been a general manager in the division since 1964. Morro received a BS degree from Texas Christian University, an MS from the State University of Iowa and in 1941 received the equivalent of a PhD from Harvard University.

### CHILD CARE

Want your children to look up to you? Then walk into their room and turn off the TV!

## Y-12ers' Son And Daughter Are Declared Oliver Springs High Scholastic Leaders



Ernie Harris

Congratulations to the scholastic leaders at Oliver Springs High School. Both the Valedictorian and Salutatorian are children of Y-12ers.

Heading the class is Ernie Harris, son of Rembert Harris, Building, Grounds and Maintenance Shops. Past-president of the Spanish Club, Ernie also has served on the school annual staff. He plans to further his education in engineering at Tennessee Polytechnic Institute.

The daughter of Mr. and Mrs. Allen Donahue, Margaret Ann, capped number two honors in her four-year average at school. She has played basketball for the past three years, is a member of the Beta Club (holding down the job of treasurer) and is also on the annual staff.

Margaret Ann plans to get an early start at the University of



Margaret Ann Donahue

Tennessee in June, almost immediately following her graduation. She is the daughter of Frances, Superintendents Division, and E. A. Donahue, Dispatching.

## Union Carbide Population Gains During Past Year

At the end of 1964, there were 74,000 men and women with Union Carbide, compared with 72,000 at the end of 1963. Of the total, approximately 60,500 are engaged in industrial operations throughout the United States, Puerto Rico, and Canada, and about 13,500 operate the Atomic Energy Commission facilities here and at Paducah.

### SUCCESS STORY

Behind every successful man is a surprised mother-in-law.



**EVEREADY BATTERIES**, designed specifically to provide long lasting power to cordless electric clocks have been introduced. The Consumer Products Division of Union Carbide, recognizing the booming clock battery business, anticipates over six million cordless clocks to be sold this year. The long-life one and one-half volt batteries are seen above.



The Scotch commercials proclaim Magic Mending Tape to be the greatest. It really isn't, but should be . . . they charge 79 cents a roll, wholesale. The same size roll of cellophane tape sells for only 15 cents . . . more than 5 times less expensive. There are virtually no jobs around the office which can't be held together without "Magic." About 2,300 rolls of this 'gold' were used last year.

Unless you're accustomed to:

- Using filet mignon to make meat loaf—

- Adding coke to Haig & Haig—

- Using a stainless steel razor blade just once—

Switch to cellophane on your next order.

Catalog number 10-760-6590 — 3" core

Catalog number 10-760-6570 — 1" core, and help save an easy \$1,000!

## Audubon Screen Tour Is Tuesday

Another in the series of Audubon Screen Tours will be shown in Oak Ridge next week. Sponsored by the Oak Ridge Conservation Club, the showing will be held next Tuesday, March 16, at 7:30 p.m. at Jefferson Junior High School.

"These Things Are Ours," a color film which is a giant study of nature, will be narrated by Mary Jane Dockery, geologist and nature lecturer. More than 30,000 feet of film went into the production of the film which includes the filming of a cloud of midges, the growth of a forest from clusters of lichen on a bare rock to mature trees. Snails and frogs at home in the mosses and fungi of the forest floor are also caught in the film.

Miss Dockery has produced a weekly radio program called "Nature Spy" and has appeared on numerous television shows devoted to natural history. She is presently the geologist and nature lecturer on the staff of the Grand Rapids Public Museum. Last year she was named "Conservationist of the Year" in Michigan.

Admission price for "These Things Are Ours" will be \$1 for adults and 50 cents for students. Tickets will be available for non-season holders at the door of Jefferson Junior.

## Dave Campbell Is Science Fair Top

Powell High School Senior David Campbell placed high in that school's science fair recently. Dave took first prize in the senior division with his exhibit on bioluminescence, the study of light given off by living organisms.

He is the son of Sam Campbell, Metallurgical Development.

Sharon Muzzall, daughter of C. E. Muzzall, Process Engineering, was second place winner in the senior division.

### INFERIOR MAN

"I am the inferior of any man whose rights I trample under foot. Men are not superior by reason of the accidents of race or color. They are superior who have the best heart—the best brain." Robert G. Ingersoll.

## SNAP-7F Shield Made In Y-12 Oceanbound

### Nuclear Generator Will Power Offshore Facility

The SNAP-7F, an "atomic battery" whose radiation shield was fabricated in Y-12, will go into operation this Spring in the Gulf of Mexico.

The nuclear generator, powered by heat from radioactive strontium-90, will power navigational aids on an unmanned offshore oil platform of the Phillips Petroleum Company. The platform is located about 40 miles southeast of Cameron, Louisiana.

The SNAP-7F will power continuously-flashing navigational lights and an electronic foghorn, both of which are required on all offshore platforms. Electrical power for such tasks is now supplied by diesel generators. The five-year lifetime of SNAP-7F far exceeds that currently available with diesel generators and battery systems frequently used on such platforms, both of which require frequent servicing.

The nuclear generator is 22 inches in diameter and 34 inches high. Including the three and one-quarter inch thick radiation shield of depleted uranium, made here, it weighs 4,600 pounds.

The fuel was provided by the Hanford Laboratory at Richland, Washington and processed and encapsulated at Martin Company's fuel processing facility at Quehanna, Pennsylvania. The heat from the radioactive decay of the fuel is converted directly into electricity through 120 pairs of thermocouples surrounding the fuel.

SNAP-7F is one of a series of six experimental units developed by the United States Atomic Energy Commission to demonstrate the feasibility of long-lived sources of electrical power. The generator's shield is almost identical to those made previously in Y-12 for the SNAP-7B and SNAP-7D.

## 'Beauty Part' Is Playhouse Offering

The Oak Ridge Playhouse rings up the curtain this weekend on "The Beauty Part," a satirical comedy of a rich young garbage disposal heir who decides to repudiate his money in search for integrity in the arts.

Handling the difficult end of costume is Charlene Palkowski, Dan's wife. Although the cast only requires 15 characters, there are some 40 changes of outfit because many in the cast play from three to six different characters.

"Beauty Part" opens Friday, March 12 and will play Saturday and Sunday, March 13, 14 and will be repeated again March 19, 20 and 21.

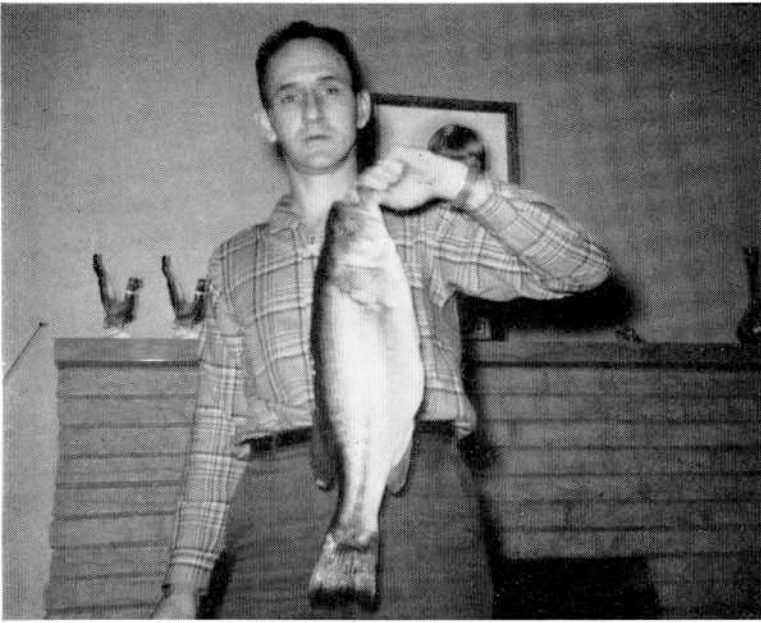
Tickets may be reserved at the box office, telephone 483-1224, between 10 a.m. and 5:30 p.m. Sell-out houses have been the rule rather than the exception for Playhouse productions thus far this year.

## Strontium Titanate Is Physics Seminar Topic

J. F. Schooley, National Bureau of Standards, will discuss "Superconductivity in Semiconducting Strontium Titanate," at this week's Physics Division seminar.

The seminar will be held Friday, March 12, at 3:15 p.m. in the East Auditorium of ORNL's 4500 building.





**MILAS SWEET, URANIUM CHEMISTRY**, has the honor of submitting the first entry in 1965's big fishing contest, the annual one, that is. The big largemouth bass will surely put Sweet in there for some kind of honors. The denizen fell victim of a "creme" worm on a jig hook in the waters of Norris Lake recently. Details on the Spring Rodeo can be found below.

## New Spring Fishing Rodeo Is Opened As Annuals Start In

Recreation has just announced that a new Spring fishing rodeo is now open for Y-12 anglers. Any fish caught between March 6 (last Saturday) and Monday, June 14 may be entered in the plant competition. Classes run the gamut species-wise including smallmouth, largemouth, striped bass, walleye, sauger, crappie, trout, bream or bluegill.

No photograph is needed with the Spring contest, as is required

in the annual competition.

All fish must be caught in Tennessee waters to be eligible, and certification as to weight and length must be made by a dock operator or attendant.

Plenty of the Spring entries are available in the Recreation Office, and annual forms are available there, also.

Don't catch a big one this Spring, and then be caught without a rodeo blank in the old tackle box!

## Beavers Still Are Volleyball Leads

Volleyball action came fast and furious last week as teams lined up in deadheat. Y-12's Beavers still hold a spotless record, along with the Set Ups.

The first game of the week saw the Old Men take three games from Y-12's Eagles, 15-10, 15-13, and 15-4. The Eagles did manage to win game number one 15-8. The Vaults took a four-point win from Y-12's Yanks by forfeit.

The Scrubs won three from the Mix Ups, 15-13, 15-5, 15-10, losing the last game 20-18. The Set-Ups won four forfeited games from the K-25 Instruments.

The Beavers took forfeited wins from ORSORT. The Bums and Scrubs shared two games... the Bums winning 15-10 and 15-2 and the Scrubs taking the last two games 15-2, 15-13.

League standings follow:

Team	W	L
Set Ups	12	0
Beavers, Y-12	12	0
Vaults	8	4
Old Men	7	5
Scrubs	8	8
Eagles, Y-12	6	6
K-25 Instruments	6	6
Bums	5	11
Mix-Ups, K-25	4	8
Yanks, Y-12	1	8
ORSORT	1	8

## Recreation Has 10 World's Fair Tickets

The Recreation Department has 10 tickets to the World's Fair, unused from last year. (The tickets were good for either 1964 or 1965). If anyone is going to the Fair this year, they might be interested in saving on gate fares.

The tickets are \$1.35 each (they are \$2.50 in New York). If interested call Recreation, extension 3-7109.

## Rollmasters Roll Into Bush Highs

The Bush League resumed action last week after a holiday hiatus. The Rollmasters rolled into first place by virtue of a four-point win over the Spec Five alleymen. Three points went to the Beavers over the Beginners, the Outcasts over the Hi Balls and the Teds over the Seven Sixties.

Ed Cothron, Bginners, bugged the alleys for high singles, taking a scratch of 226, and a handicap game of 262. Frank Winstead, Rollmasters, rolled into the winning circle of series highs with a 564 and 642.

The Beavers took high single scratch honors with 832... while the Rollmasters rolled a 988 handicap single. The 'Masters also took both series highs, 2412 scratch and 2895 handicap.

League standings follow:

Team	W	L
Rollmasters	25	11
Beavers	24½	11½
Outcasts	21	15
Spec Five	19	17
Beginners	16	20
Hi Balls	14½	21½
Teds	13	23
Seven Sixties	11	25

## Small Bore Rifle Men Are Paged

Marksmen interested in firing in the small bore competition for Carbidors should gather on Thursday nights at the Anderson County Gun Club, Clinton.

New competition is underway and equipment is available at the range for newcomers. Firings start at 7:30 every Thursday.

Come on out, says Jack Huff. If you need more information call Jack on extension 3-5407.

Loose talk is poison.

## Metals & Ceramics Cinch Basketball

### ORNL Team Won First Half Also

Metals and Ceramics cinched the Basketball League last week... thus winning the first and second halves.

Monday's action saw Biology take ORINS 36 to 24. The All Stars rode past the Raiders 44 to 22, and Jim George hit the bucket for 19. Jim Batch took eight points for the losers.

Tuesday's games started with Metals and Ceramics racking up another win at the expense of Analytical Chemistry, 48 to 37. AC gave the boys a chase for three quarters... but big Jim Carter took the reins as usual and tallied 20 big points.

Biology, led by Harvey Goolsby, tromped the Raiders Tuesday 55 to 32. The Fearless Five took Y-12's Eagles 70 to 29.

Wednesday's action began as Analytical Chemistry took the Fuds 54 to 30... with John Jones taking 21 points. Don Wood was big boy on the boards for the Fuds, taking a 28 count.

Fearless Five won from the All Stars 47 to 44, in a fine game which carried right down to the final gun. Larry Finch was red hot, hitting 24 for the FF crowd, with his one-hand specialties.

The final game of the week saw the Metals and Ceramics cinch their title by belting the Raiders 41 to 20. A very clean ball game it was, too, which saw the M&C boys scoring at will, especially when they needed the counting cards.

League standings follow:

Team	W	L
Metals & Ceramics	8	0
Biology	5	2
Fearless Five	5	2
Analytical Chemistry	4	2
Fuds	4	3
All Stars, K-25	2	5
ORINS	1	5
Raiders, Y-12	1	6
Eagles, Y-12	1	6

## Goofers Keep Good Mixed Alley Lead

The Goofers kept their nine point advance in the Mixed Bowling League last week by taking three from the Chumps. The Alley Cats moved into second place by dumping the Blue Angels for three also. The Twisters took three from the Turtles, and the Bingos and Alley Oops shared two each.

Ella Stansell, Goofers, swept the boards for female honors, rolling singles of 178 scratch, 226 handicap; and series of 447 and 591. Bill Stephens, Goofers, took a 200 scratch game, and a 549 scratch series. Pete Rekemeyer, Twisters, took a 245 handicap single; and Mike Mount, Chumps, added a series handicap score of 645 to his credit.

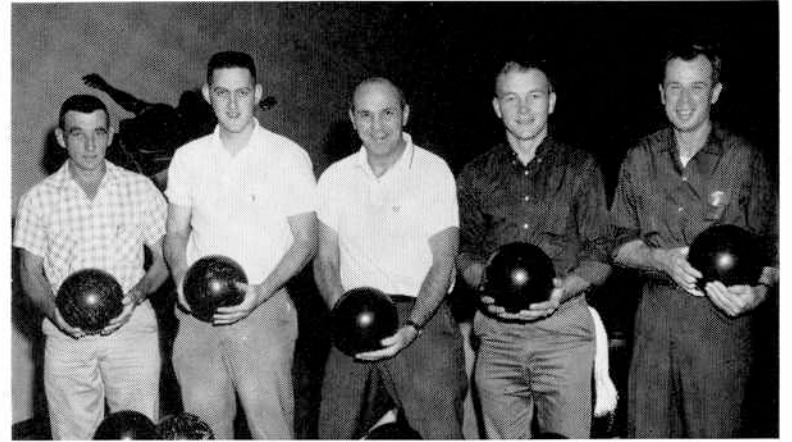
The Goofers were high scratchers, rolling singles of 629, and 1856 in series. The Twisters rolled handicap highs of 787 singles, 2293 series.

League standings follow:

Team	W	L
Goofers	32	8
Alley Cats	23	17
Alley Oops	22	18
Blue Angels	22	18
Chumps	19	21
Turtles	17	23
Twisters	17	23
Bingos	12	28

## EXPENSIVE VACATION TRIPS

If it cost one cent a thousand miles to travel, a trip around the world would cost 25 cents; to the moon, \$2.38; to the sun, \$285; but a trip to the next nearest star would cost \$260,000,000!



**IN THIS CORNER ARE** the Five Roses and the Rodders. In the top photograph are the Five Roses (an original name if there ever was one!)... from left, J. D. Collins, Tommy Sparks, R. E. Levine, B. D. Cofer and Woody Chilcoat. In the bottom pix are the Rodders... W. C. Smith, J. F. May, Charley Gaylor, E. T. Ely and J. V. Haggard.

## Big Five Now Tied With Hi Lifers As C Bowling League Enters Its Final Lap

The Big Five moved up to tie with the Hi Lifers for first place standings in the C Bowling League last week. They took the Lucky Strikes for three points, while the Lifers lost three to the Sunflowers.

Four point wins went to the Rounders over the Badgers and the Parbusters over the Shud-A-Beens. Other three-point wins went to the Strikers over the Hookers, and the Rodders over the Five Roses.

J. D. Collins, Five Roses, hit a 236 scratch, 259 handicap single high. J. W. Halsey, Sunflowers, socked in a series scratch high of 601 and E. T. Ely, Rodders, rolled a 655 handicap series.

The Sunflowers and Hi Lifers split singles' honors... the 'Flowers rolling scratch scores of 935 and the 'Lifers taking a 1082 handicap count. The Sunflowers, however, dominated series counting with 2699 scratch and 2990 handicap.

League standings follow:

Team	W	L
Hi Lifers	24	12
Big Five	24	12
Rounders	22	14
Strikers	20	16
Parbusters	19	17
Hookers	18	18
Sunflowers	17	19
Rodders	17	19
Lucky Strikes	16	20
Shud-A-Beens	14	22
Five Roses	16	20
Badgers	9	27

## Hot Shots Take E Bowling Lead

Joe Murph, Cannon Balls, expressed his way through E Bowling League action last week. He took singles of 247 scratch, 278 handicap... and series of 587 and 680. His team won three from the Four Squares.

The Alley Bees and Pintwisters split two points each, while the Hot Shots moved into first place by winning a bye.

The Cannon Balls rolled high singles, taking a game of 699 scratch and 834 handicap. The Alley Bees captured highs series-wise with 1917 and 2316.

League standings follow:

Team	W	L
Hot Shots	29	15
Alley Bees	28	20
Pintwisters	22	22
Four Squares	23	25
Cannon Balls	22	26

## Bumpers Move Up In Classic Action

The Bumpers moved up within spitting distance in the Classic Bowling League last week by trouncing the Smelters for the full count. The only other two full sweeps were the Tigers over the Screwballs, and the Markers over the Cubs.

Three point wins went to the Eightballs over the Swingsters, the Wolves over the Rebels, and the Splinters over the Rippers. The Has Beens and Wasps and the All Stars and Playboys broke even, sharing two each.

Jack Spears, Rebels, hit high scratch scores with 228 in a single game, and 604 in series counting. H. Horne, Eightballs, took handicap tallies of 248 in singles, 662 in series.

The All Stars took high singles of 913 and 1055; while the Tigers took series counting with 2588 scratch, 2957 handicap.

League standings follow:

Team	W	L
Rippers	28	8
Bumpers	25	11
Tigers	24	12
All Stars	23	13
Has Beens	22	14
Eightballs	21½	14½
Playboys	21	15
Rebels	18	18
Cubs	16	20
Swingsters	16	20
Wolves	15	21
Markers	15	21
Splinters	14	22
Wasps	10½	25½
Screwballs	10	26
Smelters	8	28

## TEMPERATURE DOWN

"Once Antigonous was told his son was ill, and went to see him. At the door he met some young beauty. Going in, he sat down by the bed and took his pulse. 'The fever,' said Demetrius, 'has just left me.' 'Oh, yes,' replied the father, 'I met it going out at the door.'"... Plutarch.



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NUCLEAR DIVISION**

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## Society For Metals To Hear GE's Sprinkle Speak On Steel Foundry Technology

The Oak Ridge Chapter of the American Society for Metals will meet next Wednesday, March 17. The March meeting will be held at Alberti's Italian Inn, on Kingston Pike, Knoxville. (Special Note: The technical session will be held at 6:45 p.m., and dinner will follow at 8.)



J. K. Sprinkle

Special speaker at the meeting next week will be Dr. J. K. Sprinkle, applied research engineer in the field of cast structures and properties for the General Electric Company. He will speak on "Recent Advances in Steel Foundry Technology" which will include the use of a computer to determine factors influencing quality and mechanical properties; use of a water-cooled chill to obtain directional solidification; and the use of a computer to predict solidification times.

Dinner reservations may be made through Joseph W. Tackett, telephone extension 3-6571.

ASM members are asked to mark May 22 on the calendar now . . . that's Ladies Night for the chapter at the Deane Hill Country Club, Knoxville.

## Water Safety Is Taught In Courses

The United States Coast Guard Auxiliary is sponsoring a course on safety on the water in the Knoxville area. The general public is invited to the free courses which deal with the maintenance, operation and navigation of small craft.

Instructors are qualified U. S. Coast Guard Auxiliary-trained men. The courses will be held each Tuesday at 7:30 p.m. at the Tennessee Valley Bank in Bearden. Sponsored by the USCGA Flotillas 12-1 and 12-3, the courses will extend through April 20.

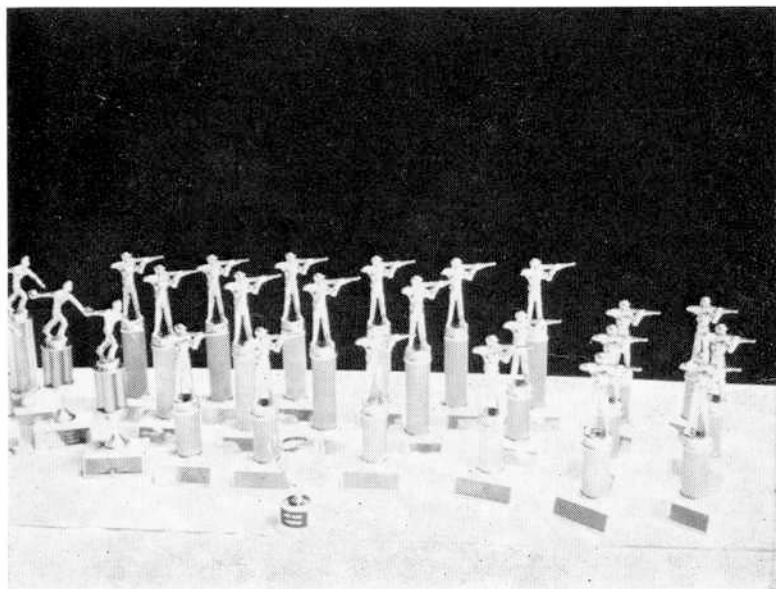
Additional information on these courses may be obtained from Harry Cupp, plant extension 3-



Rides available from Maryville by way of Bearden, Lovell Road to East, North and Central Portals, straight day. Walter Pugh, plant phone 3-5066, home phone Maryville 982-1443.

7133, or Knoxville telephone 588-2724; or William Bender, Harri-man 588-1496.

Keep your security slate clean.



**TROPHIES TAKEN AT RECENT** B Shift activities include some of the rifle match and bowling laurels seen above. The big rifle match came off January 27 and the bowling party February 12. Now, B Shifters come up with a fun night type party, Friday, March 12, at 7:30 p.m. at the Ridge Recreation Hall. They're inviting all Y-12ers to this one . . . so you'uns come.



**HERE THE NEW SHELTER MANAGERS** are seen in a classroom session. Instructors R. W. Brothers and H. N. Benninghoff stand in the right rear. They were the specially-trained counselors for the 36 Y-12ers taking special civil defense training in survival during a nuclear war.



**EXIT IS THE MAGIC WORD** for the group at 8 a.m. sharp, Wednesday, March 3. Here a group starts out of the fall-out shelter door. (Only a pair of pants and two decks of cards were left in the shelter!)

## 37 Y-12ers 'Survive' Stay In Emergency Fall-Out Shelter

Continued from Page 1  
welfare of the shelter-dwellers. These materials would include an abundance of warm clothing, sleeping bags, blankets, air mattresses, additional food, special medicines, electric lanterns or flash lights, portable battery radios, recreational items of small bulk, cook kits or nestled ware, religious items and personal items might be included such as a few small books or magazines. (Home lists for critical items could be prepared and prominently posted for immediate reference in case of an attack warning.) In the event personal items are taken into shelters, individuals must remember that this property becomes the property of the shelter and shall be under the management of the shelter manager.

### Confinement Could Be Extended

Shelter confinement, in the event of serious fallout, would continue for a minimum period of 14 days and this even could be extended in case of a staggered attack. Departure from the shelter under a fallout period is not permissible except when an extreme danger exists, such as fire, or when removal to another shelter would be mandatory for survival.

Reports from some of the 37

personnel who spent the time in the shelter said that "time passes too slow." "You should be given something to do . . . something to occupy the long hours." "Of course, 24 hours is not a long time," on shelteree admitted, "But we would have had problems had we been confined the whole two weeks."

No casualties or illnesses were recorded on the log kept by Instructor Brothers. "No babies were born during the 24-hour stay," was one entry. (The population of the crew was all male . . . so the possibilities of childbirth were rather remote.) No joking, instructors are versed in mid-wifery, just in case it is ever needed.

### Austere Diet Observed

Rations? A quart of water a day . . . 'jaw-breakers' and crackers . . . a total of 715 calories per day. Not much? No, but enough to sustain life. Man can live a lot longer without food than he can without water.

Paul V. Clemmensen is the Oak Ridge Civil Defense Director. He will be able to inform local residents where shelters are available outside the plant areas.

Some of the comments from the 36 include:

"Public apathy must be overcome in regards to civil defense," . . . E. J. Tullos.

"A condensed program to inform the general public should be started," . . . E. V. Larmoyeux.

"There should be a 24-hour stay including families," . . . L. S. Hawk.

"Shelter stay would be rough for two weeks . . . but infinitely better than the alternative," . . . R. E. Bohanan.

### Gained Knowledge

Almost to the man, each shelteree admitted gaining a new insight on civil defense. Each stressed the need for the public to get interested in shelters and learn more about survival in case of a nuclear attack.

"The whole thing was a success," one employee stated, "if for no other reason that it made us conscious of the problem."

"It's not much of a life," admitted another of the trainees, "but then it's better than no life at all."

Which just about sums up the whole idea of a fall-out shelter.



Mid-March marks important milestones to more Y-12ers who celebrate anniversaries with Union Carbide Corporation. Congratulations.

### 20 YEARS

William D. Phillippi, Dimensional Inspection, March 14.

Effie M. Culbertson, Production Analysis, March 15.

### 15 YEARS

Lonnie A. Jeffreys, Area Five Maintenance, March 10.

John E. Fagg, Buildings, Grounds and Maintenance Shops, March 15.

### 10 YEARS

Carl E. Keaton, Dimensional Inspection, March 12.

Clayton K. Monday, Utilities Administration, March 15.

Ray Curtis, Janitors Department, March 16.

## Shipley Will Lead Thermonuclear Seminar

E. D. Shipley will discuss "Ion Beam Stabilization" at this week's Thermonuclear Division seminar.

It is set for Thursday, March 11, at 9 a.m. in the TD Conference Room, Building 9201-2.